

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 061300-0680	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/031216	International filing date (day/month/year) 23/09/2004	(Earliest) Priority Date (day/month/year) 10/10/2003
Applicant OSHKOSH TRUCK CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/105566 A1 (MILLER STEVEN P) 5 June 2003 (2003-06-05) abstract; figure 2 paragraphs [0019], [0021], [0023], [0033], [0037] -----	1-10, 23-31
X	US 2002/015354 A1 (BUCKELEW RICHARD A) 7 February 2002 (2002-02-07) abstract; figures 2,3 paragraphs [0022], [0026], [0031], [0046] -----	1-10, 21-31
A	US 6 181 994 B1 (COLSON JAMES CAMPBELL ET AL) 30 January 2001 (2001-01-30) the whole document -----	1-21, 23-31



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

23 May 2005

Date of mailing of the international search report

31.10.05

Name and mailing address of the ISA

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Authorized officer

Geuss, H

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-3, 23-31

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,23-31

A vehicle system comprising a control system for an equipment service vehicle and a PDA

the control system is configured to wirelessly communicate IO information to the PDA

2. claims: 14-22

A system comprising
a fleet of equipment service vehicles comprising
a control system for an equipment service vehicle and a PDA

the control system is configured to wirelessly communicate IO information to the PDA

the PDA capable to generate a report comparing utilisation information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003105566	A1	05-06-2003	CA 2396339 A1 01-02-2003
		MX PA02007393 A 11-08-2004	
		US 2003028296 A1 06-02-2003	

US 2002015354	A1	07-02-2002	NONE

US 6181994	B1	30-01-2001	JP 2000289583 A 17-10-2000

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/031216

International filing date (day/month/year)
23.09.2004

Priority date (day/month/year)
10.10.2003

International Patent Classification (IPC) or both national classification and IPC
G06F19/00

Applicant
OSHKOSH TRUCK CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Authorized Officer

Geuss, H

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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 14-22

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 14-22
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- ☐ See separate sheet for further details

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☒ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
 - ☒ the parts relating to claims Nos. 1-13,23-31

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	11-13
	No: Claims	1-10,23-31
Inventive step (IS)	Yes: Claims	11-13
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-31
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Ref. Item V.2

Documents

The following documents cited in the international search report are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: US 2003/105566 A1 (MILLER STEVEN P) 5 June 2003
- D2: US 2002/015354 A1 (BUCKELEW RICHARD A) 7 February 2002
- D3: US-B1-6 181 994 (COLSON JAMES CAMPBELL ET AL) 30 January 2001

Novelty and Inventive Step

The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claim 1 lacks novelty.

Document D1 discloses all the following features which are included in independent claim 1 of the present application (comments and reference signs in brackets refer to D1):

- a vehicle system comprising a control system for an equipment service vehicle (abstract) comprising:
 - a power source (fig. 2)
 - a power transmission link (fig. 2),
 - a plurality of input devices (dito)
 - a plurality of output devices (dito)
 - a plurality of microprocessor based interface modules and a communication network (dito)
 - the plurality of interface modules being coupled to the power source by way of power transmission link (dito, this is evident),
 - the plurality of interface modules being interconnected to each other by way of the communication network (dito, fig.2)
 - each of the plurality of interface modules being coupled to respective ones of the plurality of input devices and the plurality of output devices (dito, e.g. ABS controller 22, P[0021])

and the plurality of interface modules storing IO status information for the ... input devices and the ... output devices (this is evident and a known feature of interface modules), and
a personal digital assistant (136,P[0033],[0037])
wherein the control system is configured to wirelessly communicate at least some of the IO status information to the personal digital assistant ([0033])

For the same reasons also independent claims 23 and 28 lack novelty, Art. 33(2) PCT, since these claims have been worded in an analogous manner.

Furthermore claims 2 - 10, 24 to 27 and 29 to 31 do not seem to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of PCT with respect to novelty and/or inventive step. These claims suggest only slight constructional changes in the device of claim 1 which comes within the scope of the customary practice - with regard to the Documents D1 to D3, followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of the claims 2 - 10, 24 to 27 and 29 to 31 lacks at least inventive step.

Reference is made to the passages cited in the search report.

Ref. Item VII

1. All Independent claims are not in the two-part form (Rule 6.3(b) PCT), which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT and PCT-Guidelines, Sect. IV, III-2.3a).
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

Ref. Item VIII

Missing reference signs render the comprehension of the invention difficult. Reference signs in parentheses should be inserted in the claims to increase their intelligibility. This applies to both the preamble and characterising portion (see the PCT-Guidelines, III-4.11).

IMPORTANT INDICATION

The applicant is requested to file amendments by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

The applicant is kindly requested to submit these indications in handwritten form on a copy of the relevant parts of the application as filed (Regel 66.8 b) PCT), the filing of completely retyped replacement pages is undesired for reasons of procedural economy.